



USER GUIDE

BOWLSAVER MAX3

DESIGNED BY TURNERS
for turners

ABOUT WOODCUT TOOLS

Established in 1990, Woodcut Tools is a family owned manufacturer of innovative, high quality tools for wood turners based in Hawkes Bay, New Zealand.

Attention to detail, hard work and an absolute commitment to quality are the hallmarks of our business. Our products are designed by turners for turners. Driven by tradition while pushing the boundaries with innovative products. To view our complete range of products visit www.woodcut-tools.com.

PRODUCT BACKGROUND

The Woodcut Tools Bowlsaver MAX3 is designed to core bowls larger than the regular two bladed Woodcut Tools Bowlsaver, therefore saving you money with your larger wood blanks.

Bowlsaver MAX3 uses three curved blades to give a combination of cuts that will remove blanks from 3 inch (75mm) up to 17 inch (450mm) from the inside of the outer bowl.

Woodcut Tools recommends you operate the Bowlsaver MAX3 with a minimum 2 horsepower lathe to core banks over 15 inch (375mm) diameter. A secure face plate and chucking system is also recommended to hold the blank and bowl on the lathe. To enable optimum holding power of the wood blank by your scroll chuck, Woodcut Tools also recommends care be taken to turn an optimum spigot on the base of the blank.

BOX CONTENTS



1. Base Plate, Blade Holder and MAX3 blades
2. Allen Keys
3. Tailstock Taper
4. Optional Toolpost
5. Handle

ASSEMBLY OF YOUR BOWLSAVER MAX3

You may find it helpful to take all the parts out of the box and lay them out on the bench in the order that they are referred to here.

1. Lay the base plate as shown in figure 1. with the small roller bearing facing towards you. This is the orientation that the Bowlsaver MAX3 will be in when on the lathe.

1.



2. Fit the support post into the near hole as illustrated in figure 2. Screw the black nylon roller, with washer, securely into the top of the support post using the allen key supplied. Slip the shaft collar up to the top of the support post, under the base plate, and tighten it lightly.

2.



3. Fit the rotation post, with the tapered end down, into the hole as illustrated in figure 3. Secure the rotation post in place from below the base plate with the screw and washer supplied. Tighten the screw securely with the allen key supplied.

3.



4. Ensure that the handle is securely attached to the blade holder as illustrated in figure 4. Use the smaller allen key supplied.

4.



ASSEMBLY

5. Attach your preferred blade to the blade holder as illustrated in figure 5, with the two cap screws supplied and tighten them firmly with the allen key.



6. Place the assembled combination of blade holder, blade and handle on to the rotation post as illustrated in figure 6. When using the large blade the end of the blade should be positioned between the two roller bearings and protrude beyond them. Secure this assembly in place with the 16mm bolt, lock washer, and plain washer supplied. Tighten the bolt firmly with a spanner. Check that the blade holder rotates freely on the rotation post.

6.

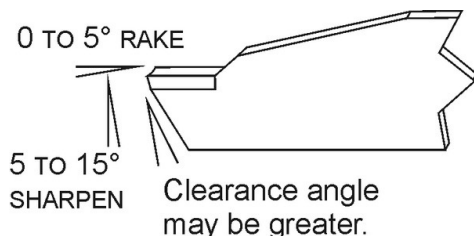


7. Loosely attach the Bowlsaver Max3 tailstock taper as illustrated in figure 6 with the indexing lever and washer below the baseplate.

8. Finally attach the Bowlsaver Max3 tailstock taper to your lathe tailstock as illustrated.

MAINTAINING TIP SHARPNESS

Check that the stellite cutting tips have not been damaged during handling or assembly. Sharpen the front face of the tip with the Woodcut Diamond Hone, 5° to 15°. Only grind the top of the cutter if you wish to change the downwards rake. Do not sharpen the sides.



LATHE SET UP

Place a drive spur or live tail into the headstock of the lathe.

Insert the tool post of the Bowlsaver MAX3 into the toolrest hole.

Position the tool post so the blade tip is centred with the point of the drive spur, or slightly above as illustrated. Tighten the toolrest locking handle. Slide the shaft collar down the support post and then tighten the grubscrew. You can now remove the Bowlsaver MAX3 from the lathe while you prepare your blank for bowl saving.



PREPARING THE WOOD BLANK

1. Mount your wood blank on a face plate and turn the outside to a bowl shape.

2. Cut a spigot (or tenon) in the foot for a large 4 jaw chuck. Woodcut Tools recommends a chuck jaw set of 150mm (6") to 200mm (8") if your wood blank is over 500mm (20") diameter. Remount the bowl blank in the scroll chuck.

3. Cut a spigot on the face (top of the bowls) side so that you can remount the wood after each bowl is saved.

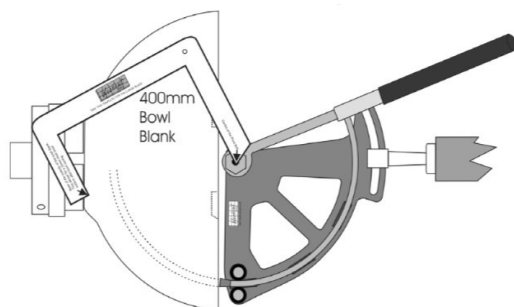
4. The bowl wall thickness will depend on how dry the wood is.

Although you can operate the Bowlsaver MAX3 with either seasoned dry wood or wet/green wood, many turners will do their bowlsaving with wet/green wood, making an allowance for future movement of the wood during the drying process. This allowance will depend on the wood species and how much movement is predicted.



PREPARING THE WOOD BLANK

Remove the lathe toolrest and mount the Bowlsaver MAX3 in the toolrest holder. Do not connect the tailstock at this stage. Bring the Bowlsaver MAX3 up to the wood and measure where it will cut. The diagram here illustrates a 400mm (16") diameter bowl blank with a cutting position to leave an outer bowl with a 30mm (1¼") wall thickness.



The Bowlsaver MAX3 is designed to cut in an exact semi-circle which has a radius that you can measure from the central rotation post of the bowlsaver.

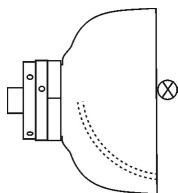
You will find a template to assist you to make the spacers in the middle of this user guide. Alternatively, you may use wide calipers to check the distances and ensure correct bowl thickness. To make this planning stage even easier Woodcut Tools has an optional Bowlsaver Laser Guide.

With the Bowlsaver MAX3 in it's cutting position, tighten the toolrest locking handle onto the support post. Bring up the tailstock and fit the tailstock taper. Lock the tailstock into position. Lock the indexing lever under the tailstock taper.

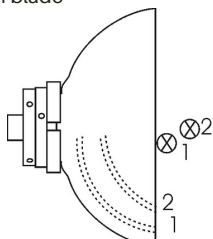
BEGIN CUTTING

Set the lathe speed between 400 to 500rpm. Slower with larger blocks when the speed of the wood past the cutting tip will be greater. Push the blade of the Bowlsaver Max3 gently into the wood. If the flow of shavings stops, then pull the blade back to enable the shavings to flow out. As you become more experienced you may prefer to change the speed setting of your lathe. Some turners prefer to increase the lathe speed, as the cutting tip moves closer to the centre of the project.

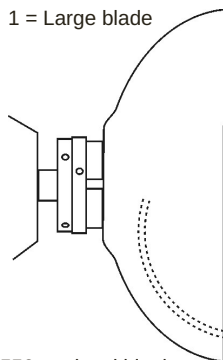
PLANNING MORE BOWLS



350mm bowl blank
Medium blade



450mm bowl blank
2 = Medium blade
1 = Large blade



550mm bowl blank
Large blade

1. To save a bowl from a 350mm (14") bowl blank the Bowlsaver MAX3 is set just a little beyond the centre line of the lathe. The outside bowl has an initial wall thickness of 25mm (1") and will require some chisel work if the inside is to follow the outside curve.

2. To core two bowls from a 450mm (18") bowl blank, the Bowlsaver MAX3 is positioned towards the operator from the centre line for bowl 1 and almost on the centre line, but away from the work face, for bowl 2.

3. Whether you start with the large or small bowl will depend on your method for remounting and finishing each bowl.

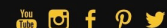
You can core bowl 2 and then bowl 1 and rely on a vacuum chuck or other mounting system to finish bowl 1. Or, you can cut bowl 1, then remount that saved blank on the faceplate and cut a spigot as you did for the first, larger, block. Then remount the wood by the spigot and use the Bowlsaver MAX3 to cut bowl 2.

4. To cut a bowl from a 550mm (22") bowl blank the Bowlsaver MAX3 is positioned towards the operator. Note how the cut curves towards the face of the block as it approaches the centre line. Both bowls will be relatively flat bottomed when finished.

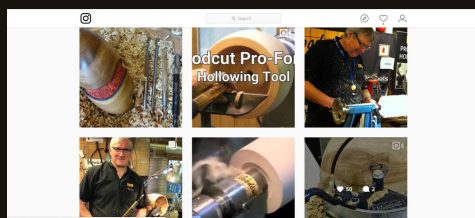
Woodcut Tools recommends a minimum chuck size of 125mm (5") for a bowl blank in excess of 375mm (15").

USER SUPPORT

Subscribe to our Woodcut Tools YouTube channel, Facebook and Instagram pages, to stay up to date with our latest product videos.



#bowlsavermax3



GENERAL SAFETY GUIDELINES

Woodcut Tools recommends these guidelines to ensure your safety.

1. Please read this user guide before operating this product.. Ensure you are familiar with the product's application and limitations plus the specific hazards peculiar to it.
2. **Wear safety glasses.** A full face mask is recommended. . Safety glasses (must comply with ANSI STANDARD Z87.1 USA) Everyday eye glasses usually are only impact resistant; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.
3. **Wear appropriate clothing.** Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewellery, which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
4. **Use ear protectors.** Use earmuffs for extended period of operation. Use muffs rated to 103 DBA LEQ (8 hr).
5. **Do not operate in a high risk environment.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lit.
6. **Ensure the work area is clean.** Cluttered areas and benches invite accidents. Build up of sawdust is a fire hazard.
7. **Keep children and visitors away.** All children, infirm and visitors should be kept a safe distance from work area.
8. **Ensure the workshop is childproof** with locks, master switches, or by removing starter keys.
9. **Ground all tools.** If the tool is equipped with a three-prong plug, it should be plugged into a three hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
10. **Ensure the tool is disconnected from the power supply** while the motor is being mounted, connected or reconnected.
11. **Disconnect tools from wall socket** before servicing and when changing accessories such as blades, bits, cutters and fuses.
12. **Prevent accidental starting.** Make sure switch is in the Off position before plugging in power cord.
13. **Never leave machine running unattended.** Do not leave tool unless it is turned off and has come to a complete stop.
14. **Keep guards in place** and in working order.
15. **Use the correct tool.** Do not use a tool or attachment to do a job for which it was not designed.
16. **Use recommended accessories.** The use of improper accessories may cause hazards.
17. **Don't force the tool.** It will do the job better and be safer at the rate for which it was designed.
18. **Maintain tools in optimum condition.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
19. **Avoid standing on the tool.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
20. **Remove adjusting keys and wrenches.** Form a habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
21. **Don't over reach.** Keep proper footing and balance at all times.
22. **Direction of feed.** Feed work into a blade or cutter against the direction of rotation or the blade or cutter only.
23. **Attention to work.** Concentrate on your work. If you become tired or frustrated, leave it for awhile and rest.
24. **Secure work.** Use clamps or a vice to hold work when practical. It's safer than using your hand and frees both hands to operate tool.
25. **Check for damaged parts.** Before further use of the tool, any part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, mounting, and any other conditions that may affect its operation. Any damaged part should be properly repaired or replaced.
26. **Drugs, alcohol and medication.** Do not operate tool while under the influence of drugs, alcohol or any medication.
27. **DUST WARNING.** The dust generated by certain woods and wood products can be harmful to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

WARRANTY TERMS

Woodcut Tools are guaranteed against faulty workmanship and faulty materials for twelve months from date of purchase. Fair wear and tear excluded. We will replace or repair any tool returned to the supplier or factory free of charge. Freight to and from the factory will be at the expense of the purchaser.



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